

Health promotion prospects in Sudan

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Introduction

A modern movement termed health promotion has emerged out of the fundamental change in strategy to achieve and maintain health ⁽¹⁾. Here, before entering to the notion of health promotion, we need to clarify the differences between prevention and promotion as terms. To prevent means “*to forestall or thwart by previous or precautionary measures; provide beforehand against the occurrence of (something); make impracticable or impossible by anticipatory action; stop from happening*” ⁽²⁾. Prevention in health, according to the classic work by Leavell and Clark “*calls for action in advance, based on knowledge of natural history in order to make it improbable that the disease will progress subsequently*” ⁽³⁾. Preventive actions are defined as interventions directed to averting the emergence of specific diseases, reducing their incidence and prevalence in populations. The discourse of prevention is based on modern epidemiological knowledge. It aims to control the transmission of infectious diseases and reduce the risk of degenerative diseases or other specific ailments. Health prevention and education projects are structured by circulation of scientific knowledge and normative recommendations to change habits. To promote means “*to further the development, progress, or establishment of (a thing); encourage, help forward, or support actively (a cause, process, etc.)*” ⁽²⁾. Traditionally, health promotion is defined more broadly than prevention, since it relates to measures that “*are not directed to a given disease or disorder, but serve to increase overall health and well-being*” ⁽⁴⁾. Promotion strategies emphasize

changing the conditions of people’s lives and work, which form the structure underlying health problems, calling for an inter-sectoral approach ⁽⁵⁾. If specificity is not achieved by a discipline, it must be based on delimitation of the problems, making it possible to implement effective practices. Based on this fact, health promotion is rapidly establishing itself as an important force and feature of contemporary approach to health and health care provision and is given top priority within World Health Organization, particularly the need to implement programs that are based on evidence and to monitor their effectiveness ⁽⁶⁾. Its necessity for developing countries is highlighted with an overall quest to raise the level of health of the population in the most effective, ethical and equitable way through reducing the environmental, organizational, social and behavioral risks to public health ⁽¹⁾.

Definition of health promotion

In 1986, the Ottawa Charter for Health Promotion defined health promotion as “**the process of enabling people to increase control over and to improve their health**” ⁽⁷⁾. Health promotion moves beyond maintaining health to improving health status and, consequently, is concerned with developing health potential and achieving health gains. Health potential may take the form of proper nutrition, or good immunity, or physical fitness which enables a person to cope well with the stress which the body may face ⁽⁸⁾. In a sense, health promotion is the science of practice and art of helping people to change their life style to move toward a state of optimal healthy lifestyles ⁽⁹⁾. Change can be facilitated through coordination of

efforts to enhance awareness, change behaviours and provide environments that support good health. Behaviour is thus seen not as isolated acts under the autonomous control of the individual but rather a socially conditioned, culturally embedded pattern of living and communities are seen to have great power to guide a value –laden, culturally and ethnically defined nature of many of the lifestyles that predominate people livings such as diet, exercise, sexual behaviour, personal hygiene, social interaction ⁽¹⁰⁾.

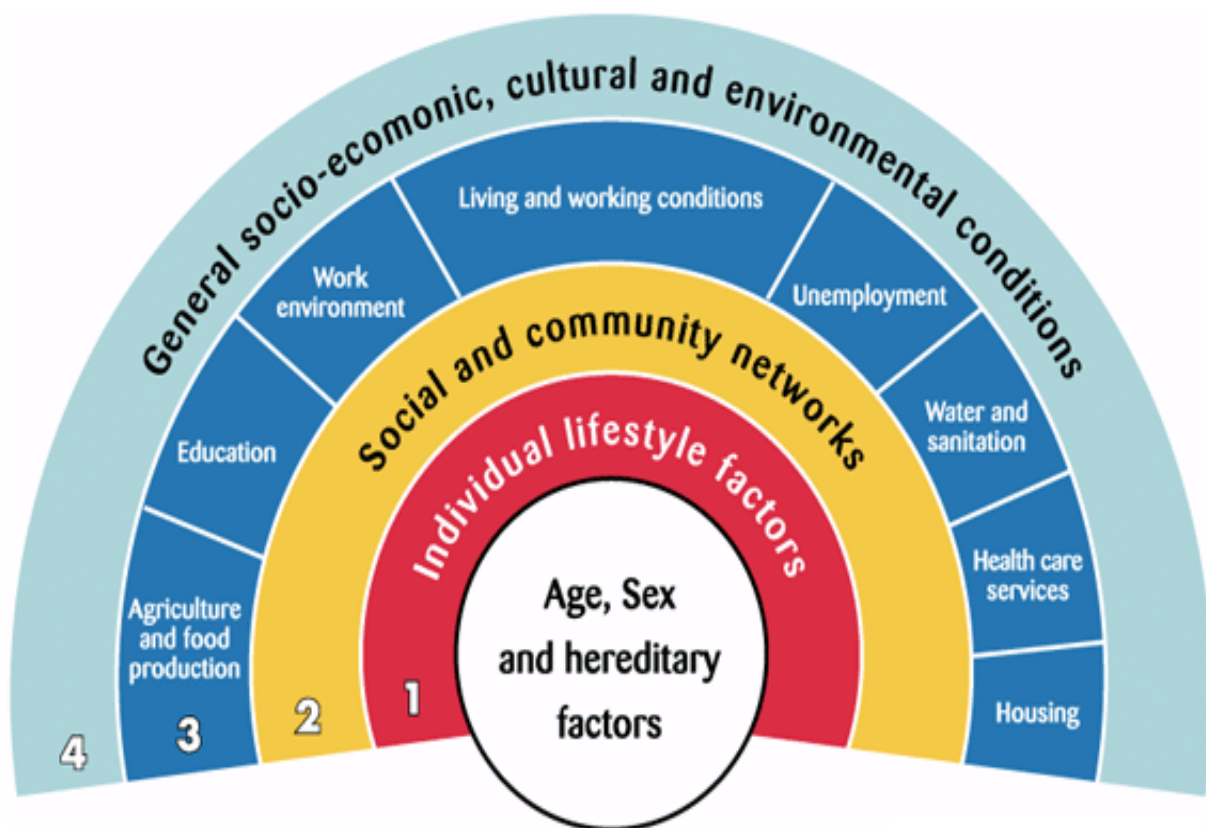
Health promotion is a dynamic field addressing a multitude of prerequisites for health not least peaceful living conditions, shelter, food, education, income, stable eco-system, social justice, equity

and sustainable resources ⁽¹¹⁾. *Enabling* is a key word: people should be allowed to achieve their fullest health potential and the core ideas of health promotion revolves around the idea of commitment to change the status quo that requires efforts not only of physicians and health professionals but also of sociologists, political scientists, religious activists and necessitates deep search of current lifestyles with the intention of changing them into new ones more inductive of and enhanceive for health ⁽¹²⁾.

Health determinants and risk factors

Many factors influence and determine health, whether at an individual or population/community level as seen in figure 1 ⁽¹³⁾.

Figure1. Multi-factorial Dimension of Health and health determinants



Source: WHO/EURO-1995

Social, economic and environmental factors are the main external or structural determinants of health. Factors such as age, sex, heredity, spirituality and lifestyle choices are vital at individual level and people's ability to pursue good health is limited by varying degrees of skills, information, social norms and economic means; the way these determinants of health interact and the linkages between them can be of major importance. Health promotion directed towards action on the causes or determinants of health to insure that the total environment, which is beyond the control of individuals, is conducive to health ⁽¹⁴⁾. People everywhere are exposed through all their lives to an almost limitless array of risks to their health, whether in the shape of communicable or non-communicable disease, injury, consumer products, violence or natural catastrophe. Sometimes whole populations are in danger, at other times only an individual is involved. Most risks cluster themselves around the poor. No risk occurs in isolation: many have their roots in complex chains of events spanning long periods of time. Each has its cause, and some have many causes ⁽¹⁵⁾. Risk is defined as "*a probability of an adverse outcome, or a factor that raises this probability*". Human perceptions of and reactions to risk are shaped by past experience and by information and values received from sources such as family, society and government. Some risks, such as disease outbreaks, are beyond our individual control; others, such as smoking or other unhealthy consumptions, are within our power to either heighten or diminish. The challenge and responsibility of reducing risks as much as possible in order to achieve a long and healthy life, is shared by individuals, whole populations and their governments.

Because of the effects of the demographic and epidemiological transitions, many middle and low income developing country populations face

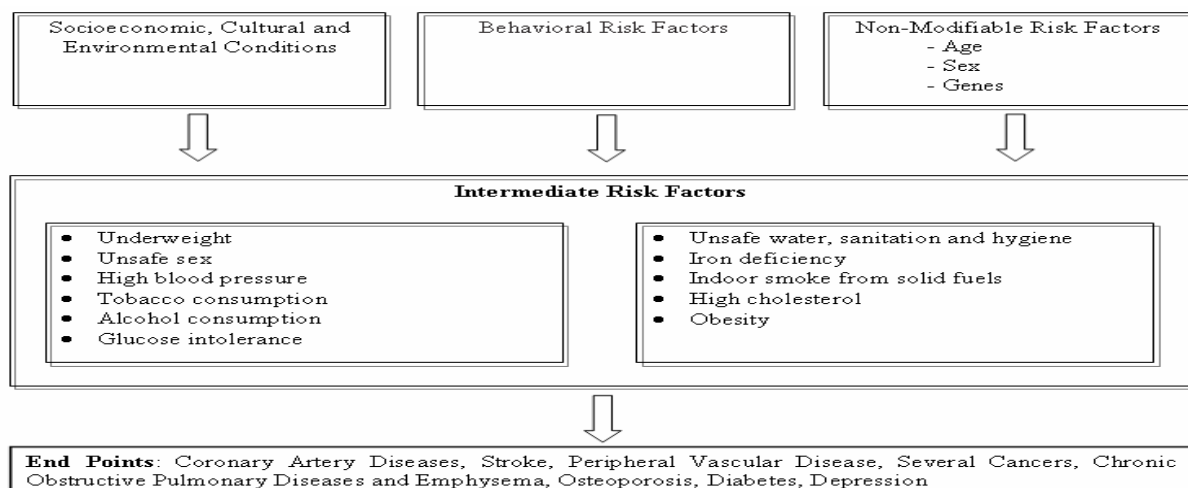
increasing risks from communicable diseases, as well as rapid increases in risks to health from non-communicable diseases. Although avoidance of risks of infection, often perceived as risk of disease, are implicit in most biomedical and public health models of disease control in developing countries, more research from the anthropological point of view is clearly needed to place these risks in perspective among a whole array of other risks to life. Given competing risks, it cannot be assumed that if people are better informed on their exposures to risk factors they will necessarily act to change their health behaviors.

The vast majority of threats to health are more commonly found among poor people, in people with little formal education, and those with lowly occupations. These risks cluster and they accumulate over time. In attempting to reduce risks to health, the focus of WHO and many other international organizations and governments are trying to redress this imbalance by directly tackling poverty, by concentrating on the risks to health amongst the impoverished, or by improving population health and hence overall economic growth ⁽¹⁶⁾. The mapping of risk factors by poverty was conducted for:

- Childhood protein–energy malnutrition;
- Water and sanitation;
- Lack of breastfeeding;
- Unsafe sex;
- Alcohol;
- Tobacco;
- Overweight
- Indoor air pollution;
- Urban air pollution

In addition, available research findings are summarized concerning the links between poverty and high blood pressure, cholesterol, physical inactivity, exposure to lead, and use of illicit drugs. These are shown in figure 2.

Figure 2: Relationship between the determinants of health, intermediate risk factors and the end points of diseases



Source: Author

According to world health report 2002, titled *reducing risk, promoting healthy life*, there are 170 million children in poor countries suffering from underweight; up to six million of them die each year as a result. At the same time there are more than one billion adults worldwide who are overweight, and at least 300 million who are clinically obese.

Underweight is most prevalent among children under five years of age, and WHO estimates that approximately 27% of children in this age group are underweight. It was a contributing factor in 60% of all child deaths in developing countries.

The report says HIV/AIDS is now the world's fourth biggest cause of death. Current estimates suggest that more than 99% of the HIV infections prevalent in Africa in 2001 are attributable to unsafe sex. In the rest of the world, the 2001 estimates for the proportion of HIV/AIDS deaths attributable to unsafe sex range from 13% in East Asia and the Pacific to 94% of the deaths in Central America. About two million deaths a year worldwide are attributed to unsafe water, sanitation and hygiene, mainly through infectious diarrhoea. Nine out of 10 such deaths are in children, and virtually all the deaths are in developing countries. Iron deficiency is one of the most prevalent nutrient deficiencies in the world, affecting an estimated

two billion people, and causing almost a million deaths a year. Globally, indoor air pollution is estimated to cause 36% of all lower respiratory infections, 28% of chronic obstructive pulmonary disease, 22% of tuberculosis, 11% of asthma and about 3% of lung cancers. The report shows that obesity is killing about 220 000 men and women a year in the United States of America and Canada alone, and about 320 000 in 20 countries of Western Europe.

The report traces the rapid evolution of the tobacco epidemic by showing that the estimated number of attributable deaths in the year 2000 – 4.2 million - is about 45% greater than what it was in 1990, with the increase being most marked in developing countries. Worldwide, alcohol caused 1.7 million deaths and loss of 56 million disability-adjusted life years. Alcohol is estimated to cause globally, 20-30% of oesophageal cancer, liver cancer, and cirrhosis of the liver, homicide, epilepsy, motor vehicle accidents, and other intentional injuries ⁽¹⁵⁾.

Mission

The mission of health promotion in Sudan is to serve building of healthy communities focusing on behavior- related health problems for the high-risk, poor and vulnerable groups, through suitable communication methods and effective health promoting social policies ⁽¹⁷⁾.

Objective

Health promotion interventions aimed at improving quality of life of the Sudanese and promoting healthy lifestyles through healthy settings and community-based interventions.

Strategies

The key strategic directions for Sudan Health Promotion are to be considered as follows:

- Building and upgrading organizational capacity for Health Promotion within Federal and State Ministries of Health aiming at putting health in the heart of high policy agenda
- Adopting a combined model of strategic frameworks incorporating the Population-Groups, Settings, and Topics/Priority Risk Factors Approaches.
- Putting more weight and emphasis on information, education, and communication – IEC. And Adopting behavioral change communication strategy as pivotal for inducing change at individual, community and organization levels that is conducive for health.
- In all its activities, programs and initiatives, health promotion strategies should follow and implement evidence-based models and practices and that calls for and request academia and scientific research endeavors.

How health promotion works?

Health promotion is characterized by certain interventions to ensure successful health outcomes for targeted individuals and communities. Three different ways and approaches of planning, implementation and evaluation of health promotion interventions are available. Over any strategy implementation period there needs to be a process of accountability, monitoring, research and evaluation, both at country and regional level. Each of these aspects must be built in to and associating all health promotion initiatives from their inception.

The American Framework: A Population-Group

Document “Healthy People”: The “Healthy People” American Document was a synthesis of the Surgeon General’s Report on Health Promotion and Disease Control the theme of which is the breaking of human life span into six main developmental stages namely ⁽¹⁸⁾.

1. Infancy and under-five children
2. Motherhood
3. Adolescence
4. Young adulthood
5. Adulthood
6. Older adulthood

Each stage has its specific risk factors and health problems and health promotion is to be delivered according to needs dictated by the characteristics of each stage. The second approach **The Canadian Framework:** The “Lalonde Report” 1974: Interlinking “Settings with Topics” The Canadian Document introduced the “Concept of Health Field” by considering health as a result of four fields.

1. Lifestyle.
2. Behaviour.
3. Human biology.
4. Health care organization ⁽¹⁹⁾.

Publication of this report and its wide acceptance and distribution as a policy document have elevated and highlighted lifestyle and behavioural issues as of utmost importance for keeping and promoting health or losing it. The document also pointed the outreaches and extensions of health promotion to the level of health care organization, thus putting the base for a structural dimension of health promotion. The Canadian model can be taken as inter-linking the setting with the topic approaches of frame working. The third approach is the **Settings Approach:** means combining healthy policy in a healthy environment with complementary education programmes and initiatives ⁽²⁰⁾. In this approach, therefore, efforts

are concentrated on working to make the setting a healthier place for people to live, learn, work and entertain. Houses, schools, workplaces, markets, hospitals, colleges, villages and cities are examples where many actions are to be initiated ⁽²¹⁾. The World Health Organization defines settings for health as *'the place of social context in which people engaged in daily activities in which environmental, organizational and personal factors interact to affect health and well being'* ⁽²²⁾. There is an explicit belief expressed within the evaluative literature that setting based activity of health promotion has expanded its theoretical and practical scope and delivered a range of successful 'outcomes' that included:

1. An increase awareness of health issues,
2. The development of health promotion policies and creation of dedicated health promotion budget,
3. Improvement of 'structural' and 'psychological' environments,
4. The development of discrete health promotion/education project,
5. Change in various individual attribute behaviours and functioning, and;
6. Economic benefits ⁽²³⁾.

Schools as setting for health promotion: Schools may participate actively to address parental and teacher involvement, and child participation in relevant school management and decision making. There may be projects to improve water facilities, toilets, school playgrounds and classrooms. Environment and health education can be strengthened with grade-appropriate curricula. There should also be attention to school health services that emphasizes prevention. Basic package for school health were identified and each state in Sudan has to provide this package. This basic package consists of the following:

1. Provision of school health record for each student
2. Medical check for students at basic and secondary school
3. Immunization against measles and meningitis
4. School health education as daily messages at the queue
5. Provision of Vitamin A protective doses
6. Provision and supply of first aid kits
7. Healthy school environment ⁽²⁴⁾

Healthy workplace: A 'healthy and safe workplace' program would necessarily operate on two levels: the 'traditional' occupational health services that emphasises factory level work by health inspector, and the newer challenge of the Small Scale Industry (SSI), which demands community-based and participatory approaches. Therefore, many issues are important regarding this program. For example (1) the education of workers about matters such as assessing risks and understanding safe procedures (2) Support and training within NGOs related to the education of workers in SSIs. (3) Worker participation and representation in industry management and industry trade/associations. (4) The involvement of mass media in education. (5) The provision of health services for workers. (6) Attention to the needs of women workers and support from women's associations. (7) Establishing channels of communication between managers, workers and authorities responsible for environmental protection. (8) Proper management of solid and liquid wastes; and (9) siting industries in locations that reduce pollution and environmental damage ⁽²⁵⁾.

Healthy market places: A 'healthy market places' program establishes partnerships between all concerned to address issues such as (1) the health conditions of stall-holder and food handlers (water, toilets, availability of health services). (2) How

foodstuff are handled and stored. (3) How to minimize any adverse impacts of the markets on surrounding residential areas. (4) Garbage removal and maintenance of cleanliness of the market area (5) the methods of inspection by government authorities (for example; how food inspector can play a more educational rather than a punitive role); and finally, (6) the role of the market place in health education ⁽²⁵⁾.

Healthy health centers and hospitals: Important areas for consideration in a 'health services upgrade' are the development of inputs from the users community to the decision-making processes and management of the health centers; the strengthening and promotion of preventive services alongside curative services; and greater equity in provision. However, Partnership may be formed between women's organization, health oriented NGOs, and ministry of health and municipal health agencies responsible for provision of health services, or for running health centers or managing hospitals, to address local priority issues. For example, (1) How to make maternal-child health services more accessible for under-served areas. (2) Improved family planning. (3) Improved health education activities. (4) Better and more appropriate and readily available drug therapies for common diseases etc. What we noticed from the setting approach according to the WHO guidelines that, setting-based projects force all participants to work cooperatively and synergistically, and make intersectoral cooperation an operational rather than a theoretical concept.

Healthy cities: The healthy city concept based on health promotion and using a socio-environmental model of health, aims to put health issues on to urban development agendas at the municipal level ⁽²⁶⁾. *A healthy city is one that is continually creating and improving those physical and social environments and expanding those community*

resources which enable people to mutually support each other in performing all the functions of life and in developing their maximum potentials ⁽²⁷⁾.

The idea of healthy cities was raised at the 'Beyond Health Care' conference in Toronto in 1984. This was based on the notion that the city is a level of governance closest to the population and therefore can best influence the factors that affect health. Moreover, the healthy cities project is useful for tackling the complex problems that shape health in cities. The cities have developed new models of collaborative working within organizations and between organizations and communities.

The Sudan framework

The Sudan framework for health promotion need to make use of all three mentioned approaches, each being of equal importance, are inter-linked and should thus be considered as a whole entity if not a one package. A "Population Group" framework is needed to address the high risk and vulnerable groups i.e. children, women, the displaced as a priority for health promotion strategic plans and mission. At the same time there is high need to follow the Setting-Based framework to address issues of supportive environments best organized around specific settings and also on a topic approach whereby we bring into focus specific issues identified as of relevance to promote health of the community. Health promotion in Sudan, therefore is suggesting a combined Healthy People/ Healthy Settings/ Specific Topics Approach as model to be developed, adopted and implemented.

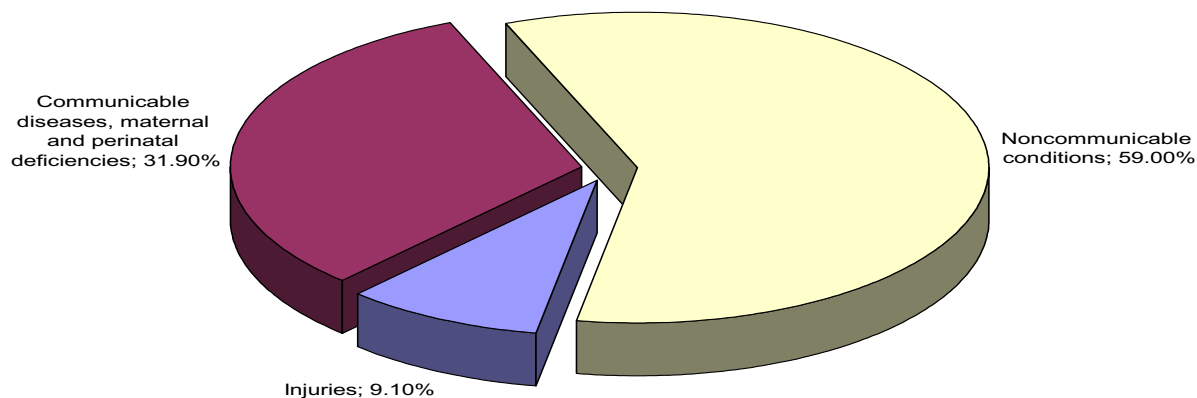
Situation so far

Based on current global trends, non-communicable diseases, mental health disorders and injuries are expected to account for 73% of deaths and 60% of the disease burden by 2020. With the rapidly changing disease patterns, rapid urbanization, growing industrialization, changing lifestyles and behavior, compounded by the increasing gap

between poor and rich, countries in our region are now facing the reality of a double burden of disease. Non-communicable diseases, mental disorders and injuries combined constitute a larger

burden of disease in terms of mortality in comparison to communicable diseases (figure 3), and the trend is increasing.

Figure 3: Global deaths by broad cause group 2000 (Total deaths: 55,694,000)



Source: WHO, World Health Report 2001

However, In Sudan the epidemiological profile of diseases is still largely dominated by communicable disease (28). Most of which are common diseases that can be prevented and/ or treated at a relatively low cost using relatively simple strategies. Malaria along with infectious childhood diseases – measles, diarrhea, acute respiratory infections and vaccine-preventable diseases all often combined with malnutrition – cause a large burden of morbidity and mortality among the Sudanese population (33,34). Lifestyle problems and non-communicable diseases, tobacco smoking and snuffing, alcohol and drug use, lack of exercise, change in sedentary and lifestyles and resultant reportable rise in hypertension, diabetes, cardiovascular diseases, cancer, arthritis and absence of counteracting interventions are new phenomena on rise. Recent data and surveys have shown that non communicable diseases are emerging as a public health problem in Sudan due to the change in socio-economic and lifestyle conditions. The prevalence of some of the non communicable diseases is shown in the following table.

Table 1: Prevalence of non communicable diseases in North Sudan during 2006 (29)

Disease	Percent
Hypertension	1.5%
Diabetes	1%
Heart disease	0.2%
Cancer	0.0%
Epilepsy	0.1%
Asthma	0.6%
Cataract	0.4%
Mental disease	0.2%

Source: SHHS, 2006

Where are we compared to others?

Health Promotion Directorate at Federal Ministry of Health is a new establishment in the Sudanese health structure; it is still not more than a composition of small-scale programs and a few isolated positions. More resources need to be diverted to enrich its interventions in order to promote the overall health of the Sudanese. It has to be transformed into an area-wide activity with a strategic approach and direction and to incorporate a range of frameworks and strategies targeting priority health issues in order to improve health; it has a commitment to address national and state priorities as well as local health issues with a strong

emphasis on people from culturally and linguistically diverse backgrounds.

Health promotion directorate is heading many programs and departments working under its umbrella namely Health Education department, School Health Department, Occupational Health Department, Non communicable disease control department which include; National Mental Health program, Cancer Prevention, Diabetes and Health of the Elderly Programs, Tobacco Control program and oral Health program. All these departments are lead by competent community physicians and have clear vision and strategic plans for the next years.

Challenges

The following challenges are facing health promotion interventions at country level:

- Lack of reliable benchmarks, specific to our country about various risk factors and their contribution to the overall burden of disease. In the absence of reliable baseline data, health promotion will not be able to make informed decisions and subsequently to measure the effectiveness of its interventions.
- How to integrate the technical aspects of healthy lifestyle promotion into a conceptual and methodological framework. At all levels lifestyles cannot be changed overnight, nor can individuals and communities facing pressure from various environmental determinants be expected to respond to health education and awareness campaigns alone.
- How to position healthy lifestyle promotion issues sufficiently high on the political agenda at the national, as well as the States and Locality levels. Modification in lifestyles has not been seen as a priority by decision makers; although they may have anecdotal evidence available from the international experience about the impact of lifestyles on health.

- Resource constraints, which are a major impediment in the planning and implementation of interventions at the country level; it is difficult to convince policy-makers to divert scarce resources to health promotion interventions. Therefore, identifying appropriate mechanisms for financing of health promotion is necessary for sustainability of health promotion efforts. Effective and sustainable financing mechanisms are at least partially dependent on participation of the community to enhance ownership and feelings of shared responsibility.

Future prospects

- Effective health promotion requires full alertness of the public about health risks associated with consumer products and services.
- Mass media and private sector along with communities should get involved in planning process for health promotion programs and participate in implementation, monitoring and evaluation of activities.
- There is an urgent need to invest in strategies which promote healthy lifestyles and focus on population-based prevention programs.
- Continue the development of healthy public policy. Involving many sectors as possible will be requested to pursue this.
- Select priority sectors or actors to work with. Since resources are always scarce, the greatest positive impact on health can not be achieved if those resources are spread out thinly to many sectors or to many actors.
- A multisectoral approach and one that involves partners from public, private, nongovernmental and community-based organizations is strongly proposed. to create alliances with old as well as with new partners at all levels.

- Increase individual skills through education and training to increase the awareness, willingness and capability for self-help by individuals.
- Strengthen community action through community development imitative to enable them to take control over and to improve their health.

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